

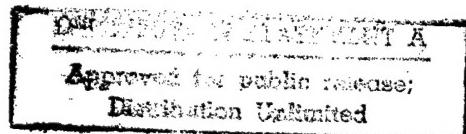
GAO

Report to the Chairman, Committee on  
National Security, House of  
Representatives

August 1998

DEFENSE  
INVENTORY

Action Needed to  
Avoid Inappropriate  
Sales of Surplus Parts



19980808 002

DTIC QUALITY INSPECTED 1

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National Security and  
International Affairs Division

B-280096

August 3, 1998

The Honorable Floyd D. Spence  
Chairman, Committee on National Security  
House of Representatives

Dear Mr. Chairman:

As requested, we reviewed the Department of Defense's (DOD) disposal process for surplus parts with both military technology and flight safety risks. Specifically, this report addresses DOD's efforts to (1) identify and destroy parts with military technology and (2) implement a flight safety program to prevent aircraft parts with potential flight safety risks from being sold through the disposal process. This report is a follow-on to our 1997 report that addressed DOD's destruction of usable aircraft parts that did not have military technology and flight safety implications.<sup>1</sup> The scope and methodology of our work are described in appendix I.

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## Background

The Federal Property and Administrative Services Act of 1949, as amended (40 U.S.C. 471-486), places responsibility for the disposition of government real and personal property with the General Services Administration. That agency delegated disposal of DOD personal property to the Secretary of Defense, who in turn delegated it to the Defense Logistics Agency. The Defense Reutilization and Marketing Service, a component of the Defense Logistics Agency, carries out the disposal function. The complexity of DOD's disposal process is characterized by the massive volume of excess property that is handled. In fiscal year 1997, DOD disposed of millions of items with a reported acquisition value (the amount originally paid for the items) of almost \$22 billion.

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## DOD's Disposal Process

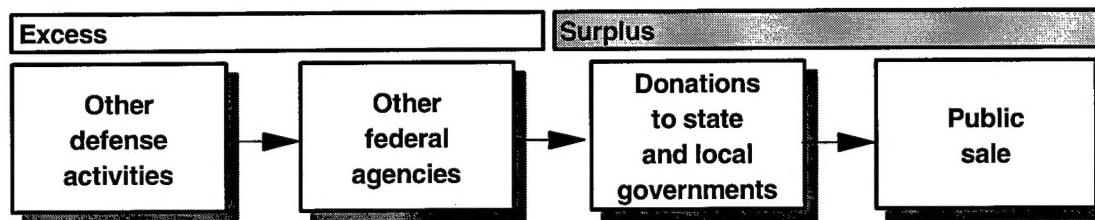
DOD, through the Office of the Deputy Under Secretary of Defense (Logistics), provides overall guidance for determining if parts should be disposed of. The military services and the Defense Logistics Agency have responsibility for determining if specific parts under their management are excess to their needs. Parts that are excess enter the disposal process and are sent to one of 154 worldwide Defense Reutilization and Marketing Offices (DRMO), or disposal yards. DRMO personnel inspect the parts upon receipt for condition; acquisition value; and special handling requirements,

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<sup>1</sup>Defense Inventory: Management of Surplus Usable Aircraft Parts Can Be Improved (GAO/NSIAD-98-7, Oct. 2, 1997).

such as those for military-sensitive items. DRMOS have disposition priorities, consistent with legislative requirements, to make the excess parts available for reutilization within DOD or transfer to other federal agencies. Parts that remain are designated as surplus and can be donated to eligible entities, such as state and local governments among many others. After these priorities have been served, parts that remain may be sold to the general public as usable items or scrap. Figure 1 shows the process for disposing of parts.

**Figure 1: Process for Disposing of Military Parts**



#### Disposal of Parts With Military Technology

The military services assign a code the first time they buy spare parts for new aircraft, ships, land vehicles, and other military weapons and equipment to indicate whether the parts contain technology conferring a military capability. The military services are also responsible for reviewing and validating the assigned codes once every 5 years. Because of concerns about safeguarding military technology, DOD issued specific policies and procedures relating to the disposal of these parts. For parts that have military technology involving weapons, national security, or military advantages inherent in them, DOD requires the parts to be demilitarized so that the technology remains within DOD. Demilitarization makes the parts unfit for their originally intended purpose, either by partial or total destruction, before or as a condition of sale to the public. The term includes mutilation, cutting, crushing, scrapping, melting, burning, or alteration that destroys the military technology in the parts.

## Flight Safety Aircraft Parts Program

DOD also has a program to identify and prevent parts with potential flight safety risks from being sold through the disposal process. In our 1994 report,<sup>2</sup> we cited concerns from the Federal Aviation Administration and the Department of Transportation's Inspector General that DOD aircraft parts, sold as scrap, illegally reentered civil aviation as usable. As a result, in July 1995 DOD initiated a departmentwide Flight Safety Critical Aircraft Parts program to identify and destroy surplus parts that could cause an aircraft to crash if the parts fail during a flight. The goal of the program is to prevent potentially dangerous parts from being sold by the DRMOS.

## Results in Brief

While DOD recognizes the dangers associated with selling surplus parts with military technology to the public and has taken certain actions to address the problem, DOD's disposal offices have inadvertently sold surplus parts with military technology intact. These sales occurred for three reasons. First, the military services assigned the wrong demilitarization codes to the parts. Because guidance was inadequate, codes assigned to parts with military technology incorrectly indicated that the parts did not contain the technology. DOD has been considering ways to address this situation but has not yet reached a final decision. Second, an initiative intended to correct inaccurately assigned demilitarization codes did not ensure that data systems were updated with the corrected codes. As a result, disposal offices continued to sell parts with military technology intact after the codes for the parts were determined to be inaccurately assigned. Personnel responsible for correcting the inaccurately assigned codes did not always update their data systems with the corrected codes. Third, the methods that the disposal offices used to demilitarize some parts did not adequately destroy the military technology contained in the parts. Guidance to disposal offices on how to destroy the military technology inherent in some items was not adequate.

DOD and its components have not aggressively pursued implementation of initiatives to prevent the sale of potentially dangerous flight safety critical aircraft parts through the disposal system. DOD and the components have not set timelines for implementing the flight safety program. Also, none of the components have fully implemented all of the program initiatives, but some have made greater progress than others. For example, at the time our fieldwork was completed, the Army had identified over 4,500 aircraft parts with flight safety implications, whereas the Navy had not identified any aircraft parts with these implications. DOD plans to increase its

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<sup>2</sup>Commercial Practices: Opportunities Exist to Enhance DOD's Sales of Surplus Aircraft Parts (GAO/NSIAD-94-189, Sept. 23, 1994).

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interaction and involvement in the program, but the military services and the Defense Logistics Agency continue to have problems accomplishing flight safety program initiatives.

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## DOD Inadvertently Sold Surplus Parts With Military Technology Intact

Because DOD has been lax in following its existing disposal policies and procedures, it inadvertently sold or offered for sale parts with military technology intact. This situation occurred because (1) the military services assigned the wrong demilitarization codes to parts with military technology that needed to be protected, (2) an initiative intended to correct inaccurately assigned demilitarization codes did not ensure that data systems were updated with the corrected codes, and (3) the methods DOD used to demilitarize some parts did not adequately destroy the military technology contained in the parts. DOD has some actions underway to address these problems, but none have been fully implemented.

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## Demilitarization Codes Are Not Accurately Assigned

Demilitarization codes are supposed to help the DRMOS determine which parts have military technology that should be destroyed before the parts are sold to the public as scrap or without the technology. However, DOD investigations and our analysis of 264 judgmentally selected items available for sale at 5 DRMOS showed that the military services often assigned the wrong demilitarization codes to parts with military technology that needed to be protected. When parts are miscoded, there is a high probability that those without military technology will be unnecessarily destroyed and those with military technology will be inadvertently sold. Such actions waste time and resources; increase costs; and, in the latter case, inadvertently make weapons and military technology available to the public.

DOD has had problems with the accuracy of assigned demilitarization codes for many years and has initiated several projects to address these problems. For example, DOD (1) established liaisons in 1991 with federal investigative agencies to help find miscoded parts with military technology that are in the hands of the public, (2) assigned its own investigators, also in 1991, to monitor DRMO activities and identify miscoded parts, and (3) validated demilitarization codes from 1993 to 1995 for various weapon systems.

Despite these initiatives, DOD documents show numerous instances of military parts and equipment with military technology intact that continue to be made available to the public. For example, in 1995 and 1997, DOD

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investigators identified hundreds of items that contained military technology sold by disposal offices. Many of these items were classified at the secret or confidential levels. The items included grenade launchers, bomb ejector arming units, radar circuit card assemblies, a guided missile launcher, key components of intercontinental ballistic missiles, weapon system technical data, electronic warfare equipment, sophisticated weapon fire control equipment, entire missiles and missile launchers, automatic weapons, guided and cluster bombs, coders, decoders, encoders, rocket launchers, secure communications equipment, and military night vision devices.

The Defense Reutilization and Marketing Service also provided us with a listing of 1,684 different items it identified as miscoded. The items contained military technology but were incorrectly coded as having no military technology implications. We obtained disposal office sales history information for 881 of these items. There were 7,702 transactions involving the sale of these 881 items to the public between 1995 and 1997. These items included parts for weapons, guided missiles, and sensitive circuit card assemblies.

Our analysis of 264 judgmentally selected items at 5 DRMOS showed that the wrong demilitarization codes were continuing to be assigned to some parts. The 264 items were recorded as either sold or available for sale to the public. We selected these items because they were parts for weapons and weapon systems but were shown in the disposal offices' records as having no military technology that needed to be protected. We reviewed item characteristics and discussed the coding accuracy with disposal office personnel. Disposal office officials told us that, in their judgment, the demilitarization codes shown in the disposal offices records as having no military technology implications were likely inaccurate for 145 of the sample items.

For selected items that appeared to be inaccurately coded, we contacted the item managers and equipment specialists and discussed the accuracy of the assigned demilitarization codes. The item managers and equipment specialists generally confirmed that the demilitarization codes for these items were inaccurate. For example, one of the items that was available for sale to the public at the DRMO in Kaiserslautern, Germany, was a waveguide assembly used in communications equipment. The item was coded as having no military technology implications. The equipment specialist confirmed that the assigned demilitarization code was incorrect.

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because the part contained technology involving special military satellite communications. The specialist corrected the demilitarization code.

According to officials at the five disposal offices visited, miscoded items account for 25 percent of their property management workload. They explained that, because of constant employee turnover, receiving personnel must be continually trained to screen for incorrect codes. Also, potentially miscoded items have to be reported to the Defense Reutilization and Marketing Service, and items with military technology requiring demilitarization must be stored apart from other items. Miscoding can have a significant impact on the disposal office workload. For example, the Kaiserslautern DRMO had a backlog of 29 semi-truck trailers full of material waiting to be processed for disposal. Officials stated that time spent on miscoded items significantly affected their ability to process the backlog and that more trailer loads of material were being received daily.

DRMOS also inadvertently offered to sell some parts with military technology intact because DRMO personnel made errors in consolidating parts having military technology implications with parts not having these implications. This occurred when several single items were accumulated together and offered for sale as a batch lot. Although the batch lot was recorded as having no military technology implications, some individual parts in the lot contained protected military technology. For example, a batch lot of 42 weapons parts available for sale to the public at the Kaiserslautern DRMO contained 7 parts with military technology that should have been destroyed (see fig. 2). DRMO personnel subsequently removed the military technology items from the batch lot. DRMO supervisors stated that action would be taken to educate personnel on the required content of batch lots and that supervisory checks of batch lot contents would be made periodically to ensure that no parts with military technology are included in future batch lots.

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**Figure 2: Batch Lot Containing Military Technology Items**



In our October 1997 report, we recommended that DOD improve the accuracy of assigned demilitarization codes by providing its personnel with guidance on selecting appropriate demilitarization codes that includes the specific details necessary to make appropriate decisions. DOD agreed with our recommendation and stated that it would work with the military services and the Defense Logistics Agency to determine the feasibility of departmentwide use of a worksheet that provides personnel with the specific details necessary to make prudent decisions on selecting the appropriate demilitarization codes. However, as of May 1998, DOD had not started using a worksheet departmentwide.

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#### Data Systems Are Not Updated With Correct Codes

Because DOD has had long-standing problems with the accuracy of assigned demilitarization codes, in 1993 the Defense Reutilization and Marketing Service developed a program for disposal offices to identify and prevent items with military technology from being sold. However, the disposal offices continued to sell parts with military technology intact because personnel often did not update their data systems with corrected codes.

Under the program, disposal office personnel check the assigned demilitarization code. If the personnel believe an item has been miscoded, the item is "challenged." They send a written report concerning the potential coding error to the Defense Reutilization and Marketing Service's

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challenge program office where the item is then recorded in the program's database as an open case. Challenge program personnel conduct research and discuss the assigned code with item managers and equipment specialists from the military services. After the correct code is determined, the item is recorded in the program's database as a closed case. Challenge program personnel are then supposed to manually enter the correct code to the data system used by disposal offices to manage surplus parts, and the equipment specialists are supposed to enter the correct code to the data system used by the military services to catalog the characteristics of the parts.

The disposal offices continued to sell parts with military technology intact because the challenge program was not effectively implemented. Both program personnel and equipment specialists did not update their data systems with the corrected codes after challenge program cases were closed. For example, disposal office personnel challenged the code for an automatic machine gun firing mechanism, which indicated that the part was appropriate for sale to the public. Research by challenge program personnel revealed that the part should be destroyed because it is the mechanism that enables the machine gun to fire automatically. However, Defense Reutilization and Marketing Service sales records show that 10 of the automatic machine gun mechanisms were later sold at a public auction because challenge program personnel and military service equipment specialists did not update their data systems with the correct code.

To determine if this problem continued to exist, we asked the Defense Reutilization and Marketing Service to identify the number of instances in which either challenge program personnel or equipment specialists did not update their data systems with the corrected codes. Defense Reutilization and Marketing Service analyses showed that challenge program personnel did not enter corrected codes to the disposal data system for 2,920 of 35,981 (8 percent) closed cases. In November 1997, the Service corrected this problem by implementing a computer program that automatically updates the disposal data system when a case is closed in the challenge program. This automation eliminates the need for manual updates to the disposal data system. However, DOD has not corrected a larger problem involving cataloging data system updates that have to be made by the military services equipment specialists. The specialists had not updated the required changes for 26,278 of the 35,981 (73 percent) closed cases that the challenge program identified with incorrect codes. In June 1998, DOD officials stated that the equipment specialists had attempted to update the

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cataloging data system but the system did not accept the changes. They are researching the cause of the problem.

We also asked the Defense Reutilization and Marketing Service to determine the number of instances in which the same item had different demilitarization codes in the two data systems. In December 1997, the Service compared the demilitarization codes in the cataloging data system used by the military services with the codes for the same items in the data system used by the disposal offices. The comparison identified 86,217 instances in which the same item had different demilitarization codes. We did not make an analysis to determine which codes were correct. However, the Defense Reutilization and Marketing Service official responsible for the challenge program believed the disposal office data system codes were more accurate than the codes in the cataloging data system because the latter system had not been updated with challenge program changes. The official said that only the military services can update the cataloging system with the correct demilitarization codes.

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**Parts With Military Technology Are Not Adequately Destroyed**

DOD 4160.21-M-1, Defense Demilitarization Manual, provides instructions on how surplus parts with military technology should be destroyed. However, DRMOS do not always adequately destroy parts with military technology associated with weapons and weapon systems. In some cases, parts containing recoverable military technology have been sold to the public and foreign countries. Purchasers of demilitarized parts have put them back together or reverse engineered the technology and remanufactured the parts so they function as they did originally.

According to DOD officials, the lack of adequate guidance to DRMOS on how to destroy the military technology inherent in some items has been a long-standing problem. For example, when DOD conducted a study in 1995 to determine if parts were being sold with military technology, it identified about 500 military weapons and weapon-related parts requiring demilitarization that were being resold by private companies. This listing included sensitive items such as F-18 guided missile launchers, technical data for Apache and Cobra helicopters, and F-15 inertial navigation systems. In some instances, the companies obtained the parts from disposal offices that did not adequately destroy the military technology before they sold the parts.

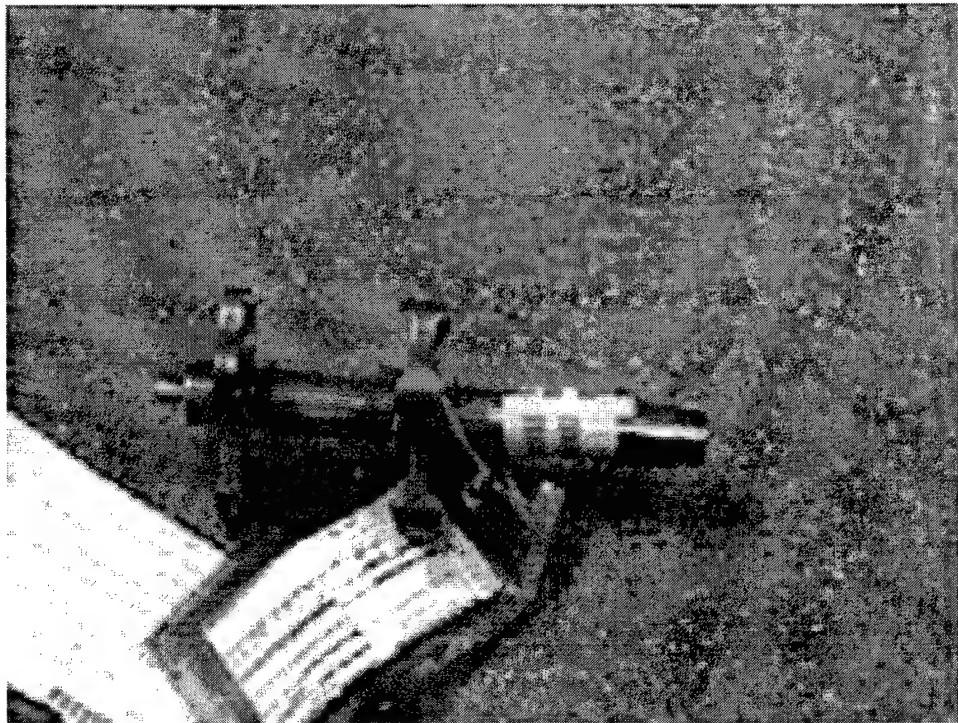
Guidance to DRMOS on how to destroy the military technology inherent in some items continues to be inadequate. Officials at the five DRMOS told us

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that they still did not have adequate demilitarization instructions and, as a result, the demilitarization process is simply a trial and error process. For example, at the DRMO at Fort Hood, Texas, we noted a part used as an ammunition feeder for an automatic gun was coded for total destruction, but no specific guidance exists on how to destroy the part (see fig. 3). DRMO officials stated that their demilitarization process previously involved cutting the shaft of the feeder into two pieces. However, the officials discovered that, when the part is demilitarized in this manner, it can be welded back together and used as it was originally intended. The DRMO personnel then began cutting off all of the feeders' appendages, which rendered the part unusable.

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**Figure 3: Ammunition Feeder for an Automatic 30-Millimeter Gun**



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#### DOD Plans to Take Corrective Action

At each of the DRMOS we visited, officials stated that losing military technology through the disposal process is a serious problem that they work on daily to prevent. DRMO officials said, however, that until the accuracy of assigned demilitarization codes and the destruction guidance are improved, disposal offices will continue to inadvertently sell some

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items with military technology that could be used by the public. To overcome these problems, DOD is considering a proposal to assign the responsibility for attaining accuracy in demilitarization coding to a single office in the Defense Reutilization and Marketing Service and is planning to provide the DRMS with computerized images on how to destroy military technology in military parts.

Historically, the military services have been responsible for assigning demilitarization codes to parts for new weapon systems and for ensuring that the assigned demilitarization codes are accurate throughout the life of the weapon system. According to DOD, over 3,000 personnel in dozens of locations are responsible for assigning demilitarization codes to approximately 12,000 new items entering the DOD supply system each month. These personnel are also responsible for validating code accuracy for items already in the system. In a 1997 report,<sup>3</sup> DOD's Inspector General recommended that DOD consolidate the responsibility to assign, challenge, and maintain demilitarization codes into a single office within the Defense Reutilization and Marketing Service. In its final comments to the Inspector General's report, DOD stated that it planned to proceed with the consolidation. However, DOD has tasked the Defense Science Board to study the entire DOD demilitarization program and plans to use the results of this study, expected later in 1998, in deciding whether to implement the consolidation.

DOD also is developing a system to provide DRMS with computerized images on how to destroy military technology in military parts. Defense Logistics Agency officials said that the imaging system will include instructions, illustrations, and destruction techniques on over 100,000 different parts. The officials said that the system will not need to include images for all parts that contain military technology because a destruction technique for a specific part in a weapon system can be used for all similar parts in other weapon systems. According to Defense Logistics Agency officials, the imaging system could be available to the DRMS by late 1998 via the Internet. The officials also stated that the success of this system will depend on whether the military services provide the required instructions, illustrations, and techniques on how to demilitarize parts and whether this information is kept up to date.

The Defense Reutilization and Marketing Service also has started two pilot projects to centralize the demilitarization process at fewer DRMO locations. The Service expects the centralized sites to destroy military technology

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<sup>3</sup>Coding Munitions List Items, DOD Inspector General, Audit Report No. 97-130, April 16, 1997.

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completely and consistently in accordance with imaging system instructions.

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## Full Implementation of Flight Safety Program Has Not Occurred

In July 1995, DOD began departmentwide implementation of a Flight Safety Critical Aircraft Parts program that included six major initiatives to address concerns about aircraft parts with safety risks being sold to the public. However, DOD is making slow and uneven progress in implementing these initiatives. DOD has not set timelines for implementing the program. Further, none of the DOD components have fully implemented all of the initiatives. As a result, DOD's disposal offices continue to sell potentially dangerous flight safety critical aircraft parts to the public.

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## Potential Dangers Provided Impetus for the Program

Recognizing the potential danger in having military aircraft parts with flight safety risks sold through the disposal process and then being reused on commercial and defense aircraft, DOD started to develop a flight safety program in 1994. Prior to that time, DOD had been selling parts with potential flight safety risks. In some instances, the potentially dangerous parts reentered defense and civil aviation and may have been reused on aircraft. According to the Department of Transportation's Inspector General, for example, a parts distributor misrepresented severely worn aircraft parts as usable and sold them to a civil aviation industry customer for reuse. The distributor bought worn out scrap military jet aircraft engine combustion liner assemblies, attempted to refurbish the assemblies by welding the cracks and in other ways making the assemblies appear serviceable, and modified the assemblies so that they would fit the civil aviation version of the jet engine.

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## Flight Safety Program Has Six Key Initiatives

In May 1994, DOD formed a team that consisted of representatives from the Office of the Deputy Under Secretary of Defense (Logistics), the military services, the Defense Logistics Agency, the Federal Aviation Administration, the General Services Administration, and the Coast Guard. The team's mission was to develop a departmentwide program to identify and prevent parts with potential flight safety risks from being sold intact through disposal offices. DOD defines a flight safety critical aircraft part as any part, assembly, or installation containing a critical characteristic whose failure, malfunction, or absence could cause a catastrophic failure resulting in loss or serious damage to the aircraft, or an uncommanded engine shutdown resulting in an unsafe condition. In May 1995, the team identified six initiatives for the military services and the Defense Logistics

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Agency to follow when implementing the flight safety program. The program initiatives were to

- standardize and incorporate the definition for items with flight safety implications into regulations and directives and make procedural changes as necessary;
- identify parts considered flight safety critical;
- code items with flight safety implications in provisioning, cataloging and supply data systems and records, designating that special handling is required when the item is sent to disposal;
- maintain historical documentation on all flight safety items;
- require that historical documentation accompany parts sent to disposal offices and that flight safety items without historical documentation be destroyed before disposal; and
- require parts manufacturers to provide an Airworthiness Approval Tag for all flight safety items delivered to DOD that have both civil and military aviation applications and develop procedures for providing the Airworthiness Approval Tag to the disposal offices when such flight safety items are no longer needed by DOD.

Under the program, parts with flight safety implications must either be accompanied by paperwork showing that the parts are safe to use or the parts must be destroyed. DOD began departmentwide implementation of the flight safety program in July 1995.

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#### Program Implementation Varies by Component

The DOD directive initiating the flight safety program did not establish milestones and priorities for accomplishing the program initiatives. DOD gave the responsibility for setting program timetables and priorities to the military services and the Defense Logistics Agency. However, our review of documents and our discussions with officials from DOD and its components showed that the components have not aggressively pursued program implementation. As a result, after 3 years, none of the DOD components have fully implemented all of the initiatives, but some have made greater progress than others. The varying progress is illustrated by two of the key initiatives discussed below.

#### Identifying Flight Safety Parts

According to DOD, the military services must review the flight safety characteristics of tens of thousands of aircraft parts and determining which parts are flight safety critical is difficult. Table 1 shows that the Army has made the most progress and the Navy has made the least in identifying parts for inclusion in the flight safety program. Flight safety

critical aircraft parts not identified may be sold through DOD's disposal system and reenter civil or defense aviation as usable.

**Table 1: Aircraft Parts Identified With Flight Safety Implications**

DOD component	Number of parts with flight safety implications	Description of parts
Air Force	878	Mostly repairable engine parts
Army	4,549	Repairable and nonrepairable engine and airframe parts
Navy	0	None identified at the time of our fieldwork <sup>a</sup>
Defense Logistics Agency	817	Nonrepairable engine and airframe parts

<sup>a</sup> In June 1998, Navy officials stated that they recently identified 15,009 parts for inclusion in the flight safety program.

As shown in table 1, the Army identified 4,549 items with flight safety implications for inclusion in the program. The Army also identified 730 nonrepairable parts used on Army aircraft, but managed by the Defense Logistics Agency, as having flight safety implications. The Army is continuing its efforts to identify additional parts with flight safety implications.

The Air Force identified 878 mostly repairable engine components as having flight safety implications. The Air Force also identified 87 nonrepairable parts used on Air Force aircraft engines, but managed by the Defense Logistics Agency, as having flight safety implications. The Air Force has not developed any time frames for identifying airframe components and other nonrepairable parts with flight safety implications.

The Navy has made the slowest progress among the military services in identifying flight safety parts. The Navy official first assigned responsibility for implementing the flight safety program initiatives said that, because of higher priority work, the Navy initially could not allocate resources to the program. However, in late 1997, the Navy started identifying aircraft parts with flight safety implications.

Defense Logistics Agency officials stated that they do not have the engineering expertise to assess flight safety implications of parts. This responsibility rests with the military services, which have identified 817 flight safety parts managed by the Agency.

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#### Data System Changes

One of the initiatives involves coding items with flight safety implications in provisioning, cataloging, and supply data systems and records. The code designates that special handling is required when the item is sent to disposal. Each of the DOD components has to make data system changes to accommodate flight safety identifier codes. The Air Force's data systems, in their current configuration, do not have the data fields needed to recognize the flight safety identifiers. However, the Air Force anticipates that all of the system changes necessary to implement the flight safety identifiers will be completed in November 1998. As an interim measure, the Air Force is separately tracking its flight safety items to ensure that documentation showing whether the parts are safe to use accompanies the items when they are processed at the DRMOS.

The Army also has to change its data system to include flight safety identifier codes. This change is needed because the Army's systems do not have the data fields in place to include identifiers for parts with flight safety implications. The Army plans to install a new automated system that will include the identifier codes, but it has not projected a completion date. As an interim measure, the Army is using a demilitarization code to identify these items. DRMO representatives said that using this code requires the disposal offices to call the item manager for disposition instructions, which is extremely time-consuming and confusing because demilitarization codes should be used only to identify the military technology inherent in the part and not whether the part has flight safety implications. An Army official responsible for the flight safety program stated that identifying flight safety items in this manner causes additional work but is warranted.

Similar to the other DOD components, the Navy's and the Defense Logistics Agency's supply data systems do not have the data fields to include the identifier codes for items with flight safety implications. The Navy is in the process of revising the data fields to accommodate flight safety codes and expects the changes to be completed in late 1998. The Defense Logistics Agency expected to correct this problem in June 1998.

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#### Potentially Dangerous DOD Aircraft Parts Are Sold by Disposal Offices

DOD's slow progress in implementing flight safety program initiatives results in the continuing sale of potentially dangerous flight safety critical aircraft parts through the disposal system. In addition, some of the parts that the military services identified as having flight safety implications were sold through DOD's disposal system without required paperwork showing that the parts were safe to use.

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Disposal office sales information from October 1994 to March 1998 for parts identified by the Air Force as having flight safety implications shows the disposal offices sold 76,525 of these parts to the public without the appropriate paperwork. For example, the Air Force identified a compressor vane used on F-15 and F-16 aircraft engines as a flight safety part. According to the Air Force engineer responsible for the engines, if the compressor vane breaks during a flight, its metal fragments would damage the engine and could cause the aircraft to crash. Disposal office records show that, on March 6, 1996, the San Antonio DRMO sold 10,101 of these compressor vanes at a public auction without knowing whether the parts were safe to use.

Also, in February 1998, the Kaiserslautern DRMO was offering for sale three tail rotor control assemblies used on the AH-1 Cobra helicopter (see fig. 4). If this part were to fail, the aircraft would spin uncontrollably and crash. The parts were not accompanied by required documentation stating it was safe to reuse them. DRMO officials said that they had not received any notification from the Army that this item had flight safety implications. Sales history information showed that this same part, described as being in severely worn condition, was sold in July 1996 by the DRMO in Columbus, Ohio, without any assurance that the part was safe to reuse.

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**Figure 4: Tail Rotor Control Assembly**



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## Conclusions

While DOD recognizes the dangers associated with selling surplus parts with military technology to the public and has taken certain actions to address the problem, DOD's disposal offices have inadvertently sold surplus parts with military technology intact. These sales occurred for three reasons. First, the military services assigned the wrong demilitarization codes to the parts. Because guidance was inadequate, codes assigned to parts with military technology incorrectly indicated that the parts did not contain the technology. DOD has been considering ways to address this situation but has not yet reached a final decision. Second, an initiative intended to correct inaccurately assigned demilitarization codes did not ensure that data systems were updated with the corrected codes. As a result, disposal offices continued to sell parts with military technology intact after the codes for the parts were determined to be inaccurately assigned. Personnel responsible for correcting the inaccurately assigned codes did not always update their data systems with the corrected codes. Third, the methods that the disposal offices used to demilitarize some parts did not adequately destroy the military technology contained in the parts. Guidance to disposal offices on how to destroy the military technology inherent in some items was not adequate.

DOD and its components have not aggressively pursued implementation of initiatives to prevent the sale of potentially dangerous flight safety critical aircraft parts through the disposal system. DOD and the components have not set timelines for implementing the flight safety program. Also, none of the components have fully implemented all of the program initiatives, but some have made greater progress than others. For example, at the time our fieldwork was completed, the Army had identified over 4,500 aircraft parts with flight safety implications, whereas the Navy had not identified any aircraft parts with these implications. DOD plans to increase its interaction and involvement in the program, but the military services and the Defense Logistics Agency continue to have problems accomplishing flight safety program initiatives.

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## Recommendations

We recommend that the Secretary of Defense take the following actions to prevent the sale of parts with military technology and flight safety implications.

- Develop an action plan with specific milestones for addressing the problem of inaccurately assigned demilitarization codes. In developing the plan, consider (1) the recommendations of the DOD Inspector General and the Defense Science Board, (2) our previous recommendation to provide

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guidance on selecting appropriate codes, and (3) procedures to ensure that items listed in different data systems have the same demilitarization code in each system.

- Establish milestones for completing the imaging system that will provide guidance on how to destroy the military technology inherent in items.
- Establish milestones for fully implementing the Flight Safety Critical Aircraft Parts Program initiatives and institute requirements for the Secretaries of the Army, the Air Force, and the Navy and the Director of the Defense Logistics Agency to periodically report on the progress being made.

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## Agency Comments and Our Evaluation

In commenting on a draft of this report, DOD agreed with our recommendations but expressed concerns that (1) the report does not fully reflect the progress DOD continues to make in the reported areas and (2) some of the statements in the report are based on information requested of DOD personnel not in a position to provide such information. DOD's comments are included as appendix II.

With regard to our recommendation for developing an action plan to address inaccurately assigned demilitarization codes, DOD stated that an action plan addressing improvements needed in the demilitarization program will be developed 6 months after publication of the Defense Science Board's final report, which is expected in the summer of 1998. DOD further stated that the action plan will incorporate milestones for completing the imaging system that will provide guidance on how to destroy the military technology inherent in items. Regarding our recommendation to establish milestones for complete implementation of the flight safety program, DOD stated that new milestones for fully implementing the program will be established no later than October 1998. Also, DOD stated that the military services and the Defense Logistics Agency will continue to report progress toward full implementation of the flight safety program on a quarterly basis to the Office of the Secretary of Defense.

Regarding DOD's two concerns, our draft report recognized that DOD has initiated several projects to address problems with the demilitarization and flight safety programs. However, we modified the final report to further recognize this in our results in brief and conclusions. With regard to DOD's comment on information sources, DOD was referring to our discussions of demilitarization coding accuracy with disposal office and Defense Reutilization and Marketing Service personnel. DOD stated that the

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personnel are not technically qualified to make decisions on coding accuracy and that it is the equipment specialists who are responsible for assigning demilitarization codes. Our report notes that our analysis includes items that had been challenged and closed out after equipment specialists had determined that they had been miscoded. Also, as stated in the report, we judgmentally selected items for review to determine if they had been coded correctly. For those we identified as miscoded, we selectively confirmed our analysis with equipment specialists. Therefore, these steps provide us with confidence that our findings are adequately supported.

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We are sending copies of this report to the appropriate congressional committees; the Secretaries of Defense, the Army, the Navy, and the Air Force; the Director, Defense Logistics Agency; and the Director, Office of Management and Budget.

Please contact me at (202) 512-8412 if you or your staff have any questions concerning this report. The major contributors to this report are listed in appendix III.

Sincerely yours,



David R. Warren, Director  
Defense Management Issues

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# Contents

Letter	1
Appendix I Scope and Methodology	22
Appendix II Comments From the Department of Defense	25
Appendix III Major Contributors to This Report	27
Table	Table 1: Aircraft Parts Identified With Flight Safety Implications 14
Figures	Figure 1: Process for Disposing of Military Parts 2 Figure 2: Batch Lot Containing Military Technology Items 7 Figure 3: Ammunition Feeder for an Automatic 30-Millimeter Gun 10 Figure 4: Tail Rotor Control Assembly 16

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## Abbreviations

DOD	Department of Defense
DRMO	Defense Reutilization and Marketing Office



# Scope and Methodology

To determine the Department of Defense's (DOD) policies and practices for destroying military parts during the disposal process, we met with officials and performed work at the Office of the Deputy Under Secretary of Defense (Logistics), Washington, D.C.; Army, Navy, and Air Force Headquarters, Washington, D.C.; the Defense Logistics Agency, Fort Belvoir, Virginia; the Defense Reutilization and Marketing Service, Battle Creek, Michigan; and the DOD Inspector General, Washington, D.C., and Columbus, Ohio. We also reviewed policies, procedures, disposal and transaction histories, and related records obtained from the Defense Reutilization and Marketing Offices (DRMO) and item managers, and documented disposal practices. We interviewed policy officials, DRMO personnel, item managers, and equipment specialists.

To obtain information on how surplus parts with military technology and flight safety implications are received and processed for sale, we performed work at five DRMOS, located in San Antonio and Killeen (Fort Hood), Texas, and in Germersheim, Kaiserslautern, and Seckenheim, Germany. We selected these locations because, according to DOD records, they sold large volumes of parts and equipment with military technology implications. We also collected information from item managers, equipment specialists, and policy officials at the Oklahoma City Air Logistics Center, Tinker Air Force Base, Oklahoma; the San Antonio Air Logistics Center, Kelly Air Force Base, Texas; the Army's Aviation and Missile Command, Huntsville, Alabama; the Naval Inventory Control Point, Philadelphia, Pennsylvania; and the Defense Supply Centers, Columbus, Ohio, and Richmond, Virginia.

To determine the adequacy of DOD's policies and procedures to identify and destroy parts with military technology, we discussed procedures, problems, and challenges with officials from the Defense Logistics Agency and the Defense Reutilization and Marketing Service; obtained data and Defense Reutilization and Marketing Service analyses showing instances in which parts got into the wrong hands through the disposal process and had different demilitarization codes assigned to the same item in different data systems; and judgmentally selected 48 items at the Texas DRMOs and 216 items at the Germany DRMO involving the accuracy of assigned demilitarization codes. We selected these items for review because they were parts for weapons and weapon systems but at the time of selection were coded in the DRMO's records as having no military technology content. We compared the assigned codes with the codes available in DOD's Demilitarization Manual and discussed the correct codes and

military technology implications of the items with disposal office personnel, item managers, and equipment specialists.

For historical perspective and illustrations of past problems, we reviewed the results of prior DOD internal studies and DOD Inspector General reports. We also used documentation and computer data obtained during our prior work on disposal operations.

We used the same computer programs, reports, records, and statistics that DOD, the military services, the Defense Logistics Agency, and the Defense Reutilization and Marketing Service use to manage excess and surplus inventories, make decisions, and determine the correct demilitarization codes. We did not independently determine the reliability of all of these sources. However, as stated above, we did assess the accuracy of the demilitarization codes by comparing the codes assigned to the same item in different data systems and by comparing assigned codes to the codes available in the Demilitarization Manual.

To determine whether parts requiring demilitarization were being adequately destroyed, we reviewed available guidance, interviewed demilitarization personnel at the five DRMOS, and observed items being destroyed.

To determine the status of DOD's flight safety program, we identified DOD's program initiatives and documented the military services and the Defense Logistics Agency's progress in implementing the program initiatives. We reviewed the policies, procedures, and related records of the military services and the Defense Logistics Agency and held discussions and performed work at the Office of the Deputy Under Secretary of Defense (Logistics). We obtained sales history information from the Defense Reutilization and Marketing Service to determine if some of the parts that the military services have identified with flight safety implications were sold through DOD's disposal system without any paperwork showing that the parts were safe to use. To further determine whether the parts identified by the military services as having flight safety implications are being sold through the disposal process, we obtained a listing of the flight safety items identified by the Air Force and the Army. We compared these items with the listing of parts being offered for sale by the Kaiserslautern DRMO. We interviewed DRMO personnel to determine whether they were aware that the items we identified had flight safety implications.

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**Appendix I**  
**Scope and Methodology**

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We performed our review between November 1997 and May 1998 in accordance with generally accepted government auditing standards.

# Comments From the Department of Defense



## OFFICE OF THE UNDER SECRETARY OF DEFENSE

3000 DEFENSE PENTAGON  
WASHINGTON, DC 20301-3000

07 JUL 1998

Mr. David Warren  
Director, Defense Management Issues  
National Security and International Affairs Division  
U.S. General Accounting Office  
Washington, D.C. 20548

Dear Mr. Warren,

This is the Department of Defense (DoD) response to the General Accounting Office (GAO) draft report, "DEFENSE INVENTORY: Action Needed to Avoid Inappropriate Sales of Surplus Parts," dated June 8, 1998 (GAO Code 709297/OSD Case 1632).

The Department concurs with the recommendations in the draft report. However, the report does not fully reflect the progress DoD continues to make in these areas. Also, we have concerns about some of the assertions in the report because they are based on information requested of DoD personnel not in a position to provide such information. We have provided information regarding these concerns directly to the review team and urge that they be considered in the final report.

The Department's detailed comments on the recommendations are included in the enclosure. The Department appreciates the opportunity to comment on the draft report.

Sincerely,

A handwritten signature in black ink, appearing to read "Roger W. Kallock".

Roger W. Kallock  
Deputy Under Secretary  
of Defense (Logistics)



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**Appendix II**  
**Comments From the Department of Defense**

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**GAO DRAFT REPORT - DATED JUNE 8, 1998  
(GAO CODE 709297) OSD CASE 1632**

**"DEFENSE INVENTORY: ACTION NEEDED TO AVOID INAPPROPRIATE SALES  
OF SURPLUS PARTS"**

**DEPARTMENT OF DEFENSE COMMENTS TO THE RECOMMENDATIONS**

Now on p. 17.

**RECOMMENDATION 1:** The GAO recommended that the Secretary of Defense develop an action plan with specific milestones for addressing the problem of inaccurately assigned demilitarization codes. In developing the plan, consider (1) the recommendations of the DoD Inspector General (DoDIG) and the Defense Science Board, (2) our previous recommendation to provide guidance on selecting appropriate codes, and (3) procedures to ensure that items listed in different data systems have the same demilitarization code in each system. (p. 23/GAO Draft Report)

**DOD RESPONSE:** Concur. The Department agrees that implementation of the DoDIG and the Defense Science Board (DSB) recommendations, plus other improvement actions underway within the Department, concerning the demilitarization program will require an action plan. This action plan will be developed six months after publication of the DSB final report which is expected in the Summer of 1998.

Now on p. 18.

**RECOMMENDATION 2:** The GAO recommended that the Secretary of Defense establish milestones for completing the imaging system that will provide guidance on how to destroy the military technology inherent in items. (p. 23/GAO Draft Report)

**DOD RESPONSE:** Concur. Milestones for completion of this project will be incorporated into the action plan addressed in recommendation 1.

Now on p. 18.

**RECOMMENDATION 3:** The GAO recommended that the Secretary of Defense establish milestones for fully implementing the Flight Safety Critical Aircraft Parts Program initiatives and institute requirements for the Secretaries of the Army, the Air Force and the Navy and the Director of the Defense Logistics Agency to periodically report on the progress being made. (p. 23/GAO Draft Report)

**DOD RESPONSE:** Concur. As we progress towards full implementation of this initiative, the Department agrees that new milestones must be established NLT October, 1998. The Military Services and the Defense Logistics Agency will continue to report progress towards full implementation on a quarterly basis to the Office of the Secretary of Defense.

# Major Contributors to This Report

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National Security and  
International Affairs  
Division, Washington,  
D.C.

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Charles Patton  
James Murphy

Dallas Field Office

Roger Tomlinson  
Jackie Kriethe  
Bonnie Carter  
Frederick Lyles